REMARKS

35 U.S.C. Section 112 Rejections

Applicant has amended the claims of the present application to obviate the cited 35 USC Section 112 rejections.

35 U.S.C. Section 103 Rejections

Paragraphs 6 and 7 of the above referenced Office Action rejects independent claims 1, 9, and 18 as being rendered obvious by Moreno (US 6,678,795). Applicants have herein amended independent claims 1, 9, and 18 to more particularly point out aspects of the present invention. As such, Applicants respectfully assert that the amended independent claims are not rendered obvious by Moreno.

Applicants have amended the independent claims to point out that trackers within the prefetch apparatus are configured to recognize accesses to a plurality of cache lines, wherein the accesses form a stream type access pattern, (emphasis added). Applicants assert that the disclosure of Moreno does not disclose or suggest the detection of stream type access patterns and the prefetching of cache lines based on the detected stream type access patterns. This limitation has been included in each of the independent claims of the present application. Applicants further point out that the term

"stream type access pattern" is defined in numerous places in the present application.

Applicants assert that Mareno does not describe access to cache lines using a stream type access pattern. Mareno does not describe or disclose recognizing a stream type access pattern. Mareno does not describe or disclose any benefits from recognizing stream type access patterns or advantages provided by acting upon such recognition and pre-caching those cache lines.

Paragraph 6 of the above referenced office action describes figure 1 of Mareno as allegedly throwing stream type accesses as in the claimed invention. Applicants reviewed figure 1 and its associated description and find no disclosure or suggestion for the recognition of stream type accesses and using said recognition to load target cache lines which comprised the stream type access pattern. Additionally, there is no disclosure within Mareno for the recognition of multiple stream type accesses, even when cache lines from different streams are selected in an intermixed, nonsequential manner.

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Accordingly, Applicants assert that the present invention as recited in independent claims 1, 9, and 18, is not rendered obvious by Marenowithin the meaning of 35 USC Section 103.

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CONCLUSION

The Examiner is urged to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application. Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Dated: 10/1, 2006

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